WHAT IS CLAIMED IS:

1. A process for making an inflated cellular cushioning article, comprising:

(A) extruding a first multilayer film having an outer heat seal layer, a tie layer, and a gas barrier layer comprising at least one member selected from the group consisting of crystalline polyamide, crystalline polyester, ethylene/vinyl alcohol copolymer, polyacrylonitrile, and crystalline polycycloolefin, wherein the tie layer comprises an anhydride modified olefin polymer containing anhydride at a level of at least 150 ppm, based on the weight of the modified olefin polymer;

(B) extruding a second multilayer film an outer heat seal layer, a tie layer, and a gas barrier layer comprising at least one member selected from the group consisting of crystalline polyamide, crystalline polyester, ethylene/vinyl alcohol copolymer, polyacrylonitrile, and crystalline polycycloolefin, wherein the tie layer comprises an anhydride modified olefin polymer containing anhydride at a level of at least 150 ppm, based on the weight of the modified olefin polymer;

(C) heating selected portions of at least one of the first multilayer film and the second multilayer film to a temperature above a fusion temperature, so that the first and second multilayer films are heat sealed to one another at a selected area, with the selected area providing a heat seal pattern which leaves inflatable chambers between the first film and the second film, whereby an inflatable cellular cushioning article is produced;

(D) aging at least one member selected from the group consisting of the first multilayer film and the second multilayer film, the aging being carried out before inflating the inflatable cellular cushioning article, and for a time and at a

temperature in accordance with at least one member selected from the group consisting of:

(i) 141°F to 250°F for a period of at least 1 second;

(ii) 101°F to 140°F for a period of at least 10 minutes;

(iii) 61°F to 100°F for a period of at least 1 hour; and

(iv) 30°F to 60°F for a period of at least 1 day;

(E) inflating the cellular cushioning article after aging.

2. The process according to Claim 1, wherein the aging is carried out before the heating of the selected portions to the temperature above the fusion temperature.

3. The process according to Claim 2, wherein both the first multilayer film and the second multilayer film are aged before the heating of the selected portions to the temperature above the fusion temperature.

4. The process according to Claim 1, wherein the inflatable cellular cushioning article is aged after the heating of the selected portions to the temperature above the fusion temperature.

5. The process according to Claim 4, wherein the inflatable cellular cushioning article is aged for a time and at a temperature in accordance with at least one member selected from the group consisting of:

(i) 141°F to 250°F for a period of from 1 second to 1 day;

(ii) 101°F to 140°F for a period of from 10 minutes to 10 days;

(iii) 61°F to 100°F for a period of from 1 hour to 100 days; and

(iv) 30°F to 60°F for a period of from 1 day to 1 year.

6. The process according to Claim 5, wherein the inflatable cellular cushioning article is aged for a time and at a temperature in accordance with at least one member selected from the group consisting of:

(i) 141°F to 250°F for a period of from 1 second to 2 hours;

(ii) 101°F to 140°F for a period of from 30 minutes to 6 days;

(iii) 61°F to 100°F for a period of from 1 day to 10 days; and

(iv) 30°F to 60°F for a period of from 3 days to 60 days.

7. The process according to Claim 1, wherein the gas barrier layer of the first multilayer film comprises at least one member selected from the group consisting of crystalline polyamide, crystalline polyester, ethylene/vinyl alcohol copolymer, polyacrylonitrile, and crystalline polycycloolefin, in an amount of from 3 to 30 percent, based on total film weight, and the gas barrier layer of the second multilayer film comprises at least one member selected from the group consisting of crystalline polyamide, crystalline polyester, ethylene/vinyl alcohol copolymer, polyacrylonitrile, and crystalline polycycloolefin, in an amount of from 3 to 30 percent, based on total film weight.

8. The process according to Claim 7, wherein the gas barrier layer of the first multilayer film comprises crystalline polyamide in an amount of from 5 to 20 percent, based on total film weight, and the gas barrier layer of the second multilayer film comprises crystalline polyamide in an amount of from 5 to 20 percent, based on total film weight.

9. The process according to Claim 8, wherein the gas barrier layer of the first multilayer film comprises crystalline polyamide in an amount of from 8 to 15 percent, based on total film weight, and the gas barrier layer of the second multilayer film comprises crystalline polyamide in an amount of from 8 to 15 percent, based on total film weight.

10. The process according to Claim 1, wherein the tie layer of the first multilayer film comprises an anhydride modified ethylene/C_{4-10} alpha-olefin copolymer, and the tie layer of the second multilayer film comprises an anhydride modified ethylene/C_{4-10} alpha-olefin copolymer.

11. The process according to Claim 10, wherein the tie layer comprises an anhydride modified ethylene/C_{4-8} copolymer having an anhydride content of at least 160 ppm as determined by pyrolysis GCMS.

12. The process according to Claim 10, wherein the anhydride modified polyolefin comprises anhydride modified linear low density polyethylene having an anhydride content of at least 180 ppm as determined by pyrolysis GCMS.

13. The process according to Claim 1, wherein the seal layer of the first multilayer film comprises at least one member selected from the group consisting homogeneous ethylene/alpha-olefin copolymer, very low density polyethylene, low density polyethylene, and linear low density polyethylene, and the seal layer of the second multilayer film comprises at least one member selected from the group consisting homogeneous ethylene/alpha-olefin copolymer, very low density polyethylene, low density polyethylene, and linear low density polyethylene.

14. The process according to Claim 1, wherein the first multilayer film has first and second outer layers, a central gas barrier layer, a first tie layer between the first outer layer and the gas barrier layer, and a second tie layer between the gas barrier layer and the second outer layer.

15. The process according to Claim 14, wherein the second multilayer film has an first and second outer layers, a central gas barrier layer, a first tie layer between the first outer layer and the gas barrier layer, and a second tie layer between the gas barrier layer and the second outer layer.

16. The process according to Claim 15, wherein:

the first and second outer layers of the first multilayer film have the same layer thickness and have the same polymeric composition, and the first and second tie layers of the first film have the same layer thickness and the same polymeric composition; and

the first and second outer layers of the second film have the same layer thickness and have the same polymeric composition, and the first and second tie layers of the second film have the same layer thickness and the same polymeric composition.

17. The process according to Claim 16, wherein the first film has a thickness of from 1 mil to 2 mils and the second film has a thickness of from 1 mil to 2 mils.

18. The process according to Claim 1, wherein the first and second multilayer films are sealed together to form both the chambers and an inflation manifold, with the inflation manifold extending along a machine direction of the inflatable cushioning article.

19. The process according to Claim 1, wherein the chambers extend transversely from an open skirt which extends along a machine direction.

20. The process according to Claim 1, wherein each chamber comprises from 3 to 40 cells.

21. The process according to Claim 20, wherein each cell has a major uninflated axis having a length of from 0.5 inch to 2.5 inches.

22. A process for making an inflated cellular cushioning article, comprising:

(A) extruding a first multilayer film having an outer heat seal layer, a tie layer, and a gas barrier layer which comprises at least one member selected from the group consisting of crystalline polyamide, crystalline polyester, ethylene/vinyl alcohol copolymer, polyacrylonitrile, and crystalline polycycloolefin, wherein the tie layer comprises an anhydride modified olefin polymer containing anhydride at a level of at least 150 ppm, based on the weight of the anhydride modified olefin polymer;

(B) extruding a second multilayer film having an outer heat seal layer, a tie layer, and a gas barrier layer which comprises at least one member selected from the group consisting of crystalline polyamide, crystalline polyester, ethylene/vinyl alcohol copolymer, polyacrylonitrile, and crystalline polycycloolefin, wherein the tie layer comprises an anhydride modified olefin polymer containing anhydride at a level of at least 150 ppm, based on the weight of the modified olefin polymer;

(C) heating selected portions of at least one of the first multilayer film and the second multilayer film to a temperature above a fusion temperature, so that the first and second films are heat sealed to one another at a selected area, with the selected area providing a heat seal pattern which leaves inflatable chambers

between the first film and the second film, whereby an inflatable cellular cushioning article is produced;

(D) aging the inflatable cellular cushioning article for a time and at a temperature so that the inflatable cellular cushioning article has a burst strength after aging which is at least 5 percent higher than the burst strength of the article before aging.

23. The process according to Claim 22, wherein the inflatable cellular cushioning article has a burst strength immediately after aging which is at least 10 percent higher than the burst strength of the article immediately before aging.

24. The process according to Claim 22, wherein the inflatable cellular cushioning article has a burst strength immediately after aging which is at least 15 percent higher than the burst strength of the article immediately before aging.

25. A process for making an inflated cellular cushioning article, comprising:

(A) extruding a multilayer film having an outer heat seal layer, a tie layer, and a gas barrier layer comprising at least one member selected from the group consisting of crystalline polyamide, crystalline polyester, ethylene/vinyl alcohol copolymer, polyacrylonitrile, and crystalline polycycloolefin, wherein the tie layer comprises an anhydride modified olefin polymer containing anhydride at a level of at least 150 ppm, based on the weight of the modified olefin polymer, the first film being

folded over so that a first portion of the multilayer film overlaps a second portion of the multilayer film;

(B) heating selected portions of the multilayer film to a temperature above a fusion temperature, so that the first portion of the multilayer film is heat sealed to the second portion of the multilayer film in a selected area, with the selected area providing a heat seal pattern which leaves inflatable chambers between the first film and the second film, whereby an inflatable cellular cushioning article is produced;

(C) aging the multilayer film, the aging being carried out before inflating the inflatable cellular cushioning article, the aging being for a time and at a temperature in accordance with at least one member selected from the group consisting of:

(i) 141°F to 250°F for a period of at least 1 second;

(ii) 101°F to 140°F for a period of at least 10 minutes;

(iii) 61°F to 100°F for a period of at least 1 hour; and

(iv) 30°F to 60°F for a period of at least 1 day;

(E) inflating the cellular cushioning article after aging.

26. The process according to Claim 25, wherein the film is extruded from an annular die.

27. The process according to Claim 25, wherein the film is extruded from a slot die an is folded over.